# CHAPTER [3]



## PART 3

Aviation Combat Element Programs

### AN/TPS-59(V)3 Radar System



#### DESCRIPTION

The AN/TPS-59(V)3 radar system is the Marine Corps' only long-range, 3-D, air surveillance, Theater Ballistic Missile (TBM) capable radar. The AN/TPS-59(V)3 radar system is a transportable, solid-state, L-band radar. It is the Marine Air Ground Task Force principal air surveillance radar and is integrated into the AN/TYO-23(V)4 Tactical Air Operations Module. It may also be configured for operation with the AN/MSQ-124 Air Defense Communications Platform to provide TBM track data to the Joint Tactical Information Distribution System. The radar has become a key component in the employment of the Navy's Cooperative Engagement Capability and is the Marine Corps' lead sensor in the development of the Composite Tracking Network.

#### **OPERATIONAL IMPACT**

The AN/TPS-59(V)3 is optimized to detect and track TBMs and air-breathing targets, either of which can be serious threats to MAGTF operations. The AN/TPS-59(V)3 will primarily be used to support MAGTF aviation during sustained operations ashore and as part of a joint theater air and missile defense architecture. The radar supports the MAGTF commander in Anti-Air Warfare operations with en route traffic control to a distance of 300 nautical miles (nmi) and TBM surveillance to 400 nmi. Eight of the 11 AN/TPS-59(V)3 radar systems were deployed during Operation Iraqi Freedom and Operation Enduring Freedom, with five radars deployed in direct support.

#### PROGRAM STATUS

The AN/TPS-59(V)3 is in the sustainment phase of its life cycle. Incorporation of engineering change proposals and technical refresh of equipment will address ongoing diminishing manufacturing sources and obsolescence issues as well as improved capabilities and new interface requirements.

Procurement Profile: FY 2007 FY 2008

Quantity: 0 0

Developer/Manufacturer: Lockheed Martin Corporation, Syracuse, NY